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Standard Costs

By PAUL E. GNAEDINGER

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(Before Montreal Chapter, April, 1935)

THERE seems to be an unfortunate atmosphere of mystery clothing the subject of standard costs. This, possibly, is due at least in part to a confusion which exists in the interpretation of the expression—standard costs. The term seems to be used variously for,

- (a) A uniform system of costing within an industry wherein all plants within the group employ a standard method of costing with uniform classifications of accounts and uniform elements of cost.
- (b) A uniform method of accounting whereby a financial statement produced by any organization will provide comparable information with that of any other.
- (c) Any recognized method of costing.
- (d) A system for measuring results against a pre-determined standard performance.

This confusion has resulted in a considerable variation in conception. There are some individuals who seem to think standard costing is a highly complex system of red tape. There are others who believe it to be a cure-all for most of industries' costing ills. There are others again who becloud the main issue with academical discussions of various accounting theories.

A Definition of "Standard"

It is advisable therefore to digress into a discussion of a fundamental conception which must be very clearly understood before a proper picture can be obtained of the subject. This is the conception of the term standard.

We can indicate a desk and say that it is five feet long or we can say that it is one and a half meters long. The terms used to express the length cannot alter its actual size in any way. Both methods of expression are correct. They are both standards—standards of measurement.

On the other hand, we can compare two desks by saying that one is a foot longer than the other and immediately an impression is gained of the relative sizes without the actual length of either having been mentioned. In this case one desk is used as a standard of length when comparing the other desk to it.

As mentioned before, this concept is important, namely, that a standard is simply a measuring stick against which various articles—or performances—can be compared, thereby giving an impression of the relative properties of each. And this interpretation applies also to costs. A standard cost of an article does not necessarily need to bear any definite or even close relationship to the actual current cost. It is a standard and is used simply as a gauge against which to measure performance.

Once this conception is thoroughly understood, it is a simple matter to substitute in our minds the single word "standards" for the expression "standard costs." Fundamentally also there is little difference between "standards" and "budgets." Budgeting as applied

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to national financial control, is familiar to us all. A modification of the same technique can be used successfully in practical business administration. A budget is used to forecast results contingent upon certain plans being followed. It is not necessarily a rigid programme. Standards, budgets and standard costs all imply the same thing, namely the principle of pre-determination rather than the older idea of ascertaining facts after they have happened.

A Dynamic Process

For this reason the practical application of standard costs goes far beyond the static cross-sectional view generally implied by cost accounting. It is dynamic. It incorporates a series of goals to be reached and provides a means of measuring accomplishment towards those goals. Thereby an executive control is developed which is impossible with the older systems of costing.

The mechanism may be expanded, depending upon individual requirements, to present a variety of detail such as:—

(a) As to materials—

1. The effect of changing prices.
2. The extent of departure from standard specification quantities.
3. Substitution of material of a cheaper or more expensive grade.
4. The economical use of materials through the variation from standard scrap or waste allowances.
5. Changes in specifications, resulting in the use of more or less materials or materials of a more expensive or cheaper grade.
6. Excess cost due to express charges, lapse of discount, abnormal duty or exchange, etc.

(b) As to labour—

1. An improvement or loss in efficiency of the operator.
2. Excess cost due to machinery of an antiquated type or faulty layout.
3. Losses due to the necessity of reprocessing work badly processed.
4. Excessive cost due to setting up machines for runs of less than normal volume.
5. Use of labour at other than standard rates.

(c) As to overhead—

1. The effect on cost of varying volume of production.
2. The effectiveness with which variable overhead costs are being controlled with respect to variations in volume.
3. Whether or not depreciation rates on special equipment are adequate.

If the management knows at all times what the various products should cost under normal or forecasted conditions, then any fluctuation in cost therefrom may be subjected to close scrutiny and the reason for such fluctuation ascertained. Definite programmes may be laid out for cost reduction work.

Permits Positive Control

In actual practice an increase in cost occasioned in any one of the elements of cost is very frequently offset by a corresponding decrease in any one or a combination of the others. In the usual type of cost system this fact frequently is obscured. With a standard cost system, however, the executive is in possession of facts which will permit him to actively direct work in a channel which can be expected to yield the desired result of maintaining costs at a uniform or decreasing level. For example, by knowing the effect of a rising price market, the result on costs may be forestalled by changes

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in specifications or by a special drive on the elimination of waste. But the most important point of all is that the executive is enabled to see from month to month a reflection of progress made and the accumulative effect on the total cost. Furthermore, the effectiveness of executive control is greatly improved due to the simplification gained through the employment of the "exception principle" which is, that factors which do not follow closely to the standard are indicated clearly and may be given intensive follow up in preference to factors which are performing as desired. This is a feature of the system.

Another important point to note is that no system of cost accounting can be considered as complete that does not provide a check on the **efficiency of the use of the money** which has been expended.

For example, in most plants a very careful check is made of the number of hours that an individual operator works and of the hourly rate at which he is paid. So long as he checks in at 7:00 in the morning, out at 12:00 noon, in at 1:00 o'clock and out again at 5:00, he is paid for 9 hours work at his current rate of pay. So far, so good, but how much **value** has he produced

It is absolutely insufficient to verify a payroll to the effect that no man receives more pay than the hours he works entitled him to receive. The important point to verify is that for every dollar paid a **normal amount of value** was received. This involves a measure of output rather than a measure of the length of time worked. It is in effect adding another dimension to our conception—lending the depth of value to the single dimension concept of price.

It is this further need of industry which has resulted in the technique of establishing standards of performance which can be used as a measure of operating efficiency and coincident with this, the development of accounting methods to determine the differences between these standards and the actual conditions, incorporating them in the general accounting scheme. By this means the cost of continually varying conditions is reflected in the ultimate operating statements.

Determination of Cost Standards

Different industries will require different elements of cost for proper control. This discussion will, however, be confined to the major ones which are common to nearly all industries. These are:—

Direct Material
Direct Labour
Burden of Overhead
Scrap or Waste Losses.

Standard cost may be defined as the cost which would result under the following conditions:—

1. When the prices paid for the materials used exactly equal the anticipated marked prices.
2. When the quantity and quality used in manufacture equals the quantity and quality pre-determined in the material specifications.
3. When the labour cost including both the hours worked and rates paid correspond with the pre-determined estimates.
4. When the normal volume of production is realized and the burden expenses incurred equal the anticipated amounts.
5. When the scrap, waste, or shrinkage loss, or yield corresponds with an amount estimated to represent good performance.

It will be noted above that material and labour costs involve factors of price (or rate) and quantity, and burden involves volume

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of production and amount of corresponding expense. These points will be developed further later.

(a) Material Costs

Direct Material includes all material known to be used in producing or forming a part of the finished product. Other materials which cannot be allocated as a specific amount to any product are charged to burden. This element of cost may be sub-divided into specific materials which represent an appreciable percentage of the total material costs. The finer the sub-division the more accurate will be the estimate of actual cost.

The first record to be set up is the standard material price record. Standard material prices should be determined by the Purchasing Department and should represent an estimate of average prices for the ensuing year.

It should be noted here that the price standards which are set are used as a basis of comparison only in order to indicate relative position of current market price as against such standards. It is not essential therefore, that either the Purchasing Department or the accountant or anyone else should become a seer when pre-determining material prices.

Material prices once set do not change, so that standard costs which are determined later in the year will continue to bear the correct relationship to the original standard cost. Furthermore, any new materials which are added to the list during the year should be included in later standard costs on a base equivalent to that used in the original list of standard prices. Full advantage can only be obtained from the standard cost method if actual results are measured against a base of this kind.

Quantities are obtained from standard specification sheets covering the product.

It is advisable to include as material the net amount only which eventually appears in the finished product. Material waste or shrinkage should be included as a separate element of cost as described under "scrap". For example, if \$10.00 worth of material is started through the factory and when the finished product is completed, if only \$8.00 worth of material remains, then the article actually cost \$10.00 for material and not \$8.00. If however the greatest value is to be obtained from this method of costing it is desirable to set down the material cost as \$8.00 and show the \$2.00 loss as scrap because by this means the loss is emphasized and the management is shown a profitable source of potential saving through a reduction of the losses during processing.

From here on the costing of material is elemental, involving the compilation of records which combine the standard prices and quantities to give standard part and article costs.

(b) Labour Costs

Direct Labour includes all labour operations in manufacturing departments which can be definitely charged to specific products without being allocated on an arbitrary basis, or in other words, all labour which can be allocated on the basis of per pound, per foot, per yard, per pair, etc.

As in the case of material, the first record to be set up is a list of standard wage rates. These can be determined by listing all the operations in the plant and grading them with regard to skill required, knowledge, hazardous conditions, unpleasant working con-

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ditions, length of training period necessary, etc., and then relating the scale to a base wage for common labour in the district. The standard rates will not necessarily be the actual rates in effect in the plant, but instead should represent current wage rates in the district for similar classes of work. For proper cost control it is necessary to have accurate standards of output or standard times for every operation in the plant. Time standards should only be set after very careful engineering study.

Under the direction of a capable engineer complex labour operations can be analyzed into fundamentals and tabulated in such a way that by synthetic methods standard times can be compiled for an almost unlimited variety of articles.

A practical example of this exists in the case of the fitting room in a leather shoe factory where the various parts are assembled to form the upper of the shoe. With the vast array of sizes, lasts and styles which results in practically an infinite variety of shapes and sizes of parts handled, the task of predetermining standard times bearing equitable relationship one with another seems at first sight to be insurmountable and particularly so when these standards are required in advance of actual manufacture for a constantly changing range of styles. Yet, given proper engineering study, the time required for the various operations can be dissected, analyzed and tabulated in such a way that the work of pre-determining standard times becomes office routine whereby reference to a sample will indicate the operations which will be employed, and physical measurements, referred to the standard tabulations will result in a synthetic standard time for the sample.

Such tabulations of basic data, once made, can be utilized for years, in fact for as long a period as fundamental equipment and methods remain unchanged. This is a desirable feature.

The next steps in the determination of labour costs parallel any other cost system in that they are determined by operations for all products. In standard costing, however, pre-determined standards are employed instead of estimated actual costs.

(c) Burden or Overhead Costs

Burden includes all of those costs or expenses of manufacture not specifically included in direct materials and direct labour. Some of the expenses are fixed regardless of the volume of production, others vary with the degree of productive activity and others are partly fixed and partly variable.

For close cost control it is recommended that the degree of variability should be determined separately for each item of burden. This analysis should be made preferably by departments.

By an analysis of this type is meant that each item of expense should be studied in relation to productive activity to determine the amount which should be expensed at each level of capacity. From this analysis budget standards can be compiled to forecast the burden cost at any degree of productive activity.

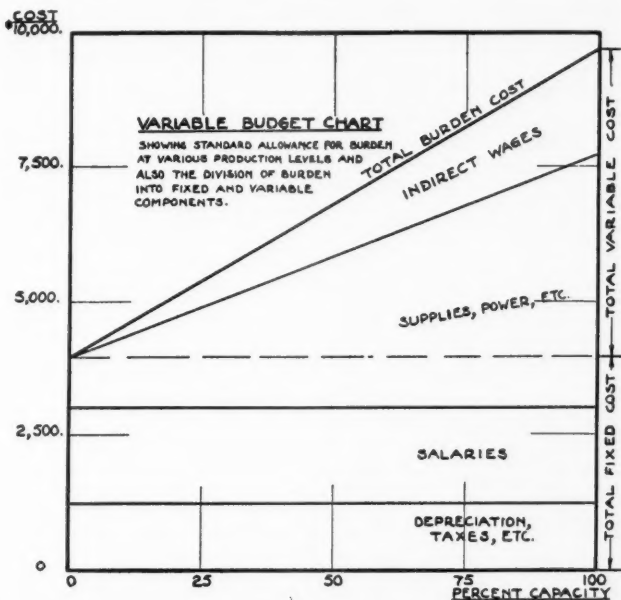
Figure 1. illustrates a so-called "variable budget" which has been compiled to represent the allowed burden for a plant. From this chart the total burden cost, or the amount of the major components, corresponding to any degree of activity can be read directly.

By the use of data of this character it is possible to compare actual expenditures with the budget allowances. Variations of actual from the budget or standard are known as "efficiency" variations; that is, the variation reflects the effectiveness of the management's control of burden expense.

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(d) Normal Volume of Production

As stated above burden almost invariably includes certain items of expense which are fixed, that is to say, that they are constant costs regardless of whether the plant is non-operating or operating at capacity. For this reason, overhead costs in total seldom, if ever, vary in direct proportion with the productive activity of the plant. In other words, cost per unit produced decreases as the number of units produced increases or vice versa. Consequently it is becoming more and more widely recognized that it is unsound practice to include in an article cost the amount of burden applicable to the product at the current rate of production activity. If this is done, it results in the following inequitable situation:



If a cost is compiled during a period of business inactivity, the overhead cost of any article is considerably increased, making it increasingly difficult for the Sales Department to dispose of the product. If, on the other hand, the cost is compiled during a period of relatively high activity, the article cost includes a low estimate of burden and if selling prices are based on this cost the price is obviously too low. Therefore, before finding standard burden costs it is necessary first of all to decide the normal rate of production which is to be used as a basis upon which to spread the total factory. Normal rate of production is generally considered to be that level production which will supply average sales demand over an economic cycle.

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(e) Burden Cost per Article

Having determined the normal volume, it is necessary to select the medium to be used for distributing the burden to individual products. There are a number of difficult plans in general use, two of the most generally accepted ones being as a percentage of direct labour and the machine hour rate basis. The principles involved in all methods are the same. Percentage of direct labour will be taken as an illustration.

These factors are involved in finding the percentage of direct labour to be used for the distribution of burden cost to individual articles, the normal volume of production, the estimated total burden cost at that level of activity, and the amount of the direct labour payroll at the same production level. The burden percentage may be determined for the plant as a whole, by departments, or by operations, depending upon the accuracy required. Generally speaking, the estimated article costs become more accurate as the detail is refined.

The method of determining the percentage is as follows:—

Find the ratio of the estimated burden cost at normal capacity to the estimated direct labour cost at the same level and express this ratio as a percentage of direct labour. The amount of burden cost contained in any article cost is then determined by finding the amount of direct labour contained in the cost of the article and applying the burden percentage determined as above.

(f) Scrap Costs

The foregoing estimates of labour, material and overhead costs should represent the value of the net amount of material which gets into the finished product without any allowance having been made for waste. In practically every manufacturing industry, waste of one kind or another occurs during the process of manufacture and material is lost. It will be obvious that if loss of material occurs through trimming, spoilage, etc., after work has been done on it, that the loss incurred involves not only the actual material, but labour and overhead of the preceding operations as well. These losses must all be carefully determined and included in the standard loss allowance. Furthermore, the standard loss allowance should not necessarily be the actual current loss but rather it should be based on good operating experience or desired performance.

(g) Product Costs

The final step is the compilation of standard product costs by combining the standard material, labour, burden and scrap costs from the tabulations of basic data. If these have been properly compiled this work is elementary routine.

The completed standard cost represents an attempt to predict what the cost should be under standardized conditions. In actual practice, however, conditions are never exactly as they were estimated resulting in actual costs which may vary appreciably from the standard. Consequently the standards are useless for many purposes until they are converted into current actual costs.

Determination of Current Actual Costs

The differences between total standard costs and actual expenditures during a period are known as "cost variations" and are

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usually expressed in dollars, given each element of cost its proper perspective. The relationship of actual to standard, expressed as a percentage, is known as the "ratio" and besides giving a measure of efficiency, provides a convenient means of adjusting standard article costs to current actual costs.

Variations and ratios are determined weekly, monthly or for any desirable period by finding the standard value of all work performed and comparing it with the actual cost of doing the same work. The ratios for labour, material, burden and scrap determined individually in this manner are applied to the respective elements in the standard article cost, the result being the approximate current actual cost.,

Assume the following as an example.—

Actual labour for a period	\$ 3,300.00
Standard labour for the same period	3,000.00

Variation	300.00
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$$\text{Ratio} = \frac{3300}{3000} = \$1.10$$

Suppose the standard labour cost of an article to be \$0.10 per piece, then the actual cost during this period was $\$0.10 \times 1.10 = \0.11

This method of applying ratios provides a comparatively simple means of estimating actual costs in advance of actual manufacture. Provided the necessary operations can be pre-determined and the standard time estimated from tabulated data on file, the standard cost can be built up. By applying to this the current cost ratios a fairly accurate estimate can be made of the current cost.

Accounting to Secure Cost Variations and Ratios

It is inevitable in the development of a comparatively new technique, such as standard costing, that various theories have been advanced involving different principles and it is important that any contemplated installation of standard costs should be carefully considered from the angle of the methods employed and the problems encountered in the operation of each type. The types can be broadly classified as follows.—

1. In which process accounts are debited at actual and credited at standard. In this case the variations must be determined and cleared from the inventory account to variation accounts.
2. In which process accounts are debited and credited at actual and standard both, for purposes of obtaining ratios and comparisons without carrying the variations to the profit and loss statement.
3. In which process accounts are debited and credited at standard and the difference between actual and standard values is charged directly to variation accounts. In this case finished goods inventory account and cost of sales are also at standard values.

The third type is probably the most comprehensive since the variations and manufacturing cost inefficiencies are shown up directly in the income and profit and loss statements, thereby possibly attaching greater importance and laying more emphasis on any inefficiencies which are revealed. However, without discussing the relative merits of each type, the general underlying principles can be illustrated by a description of a type wherein all inventory values and cost of sales are at standard values, except raw materials and supplies which are carried at actual cost, and cost variations from standard are charged to Profit and Loss.

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(a) Material

It is the intention in this plan to carry raw material inventories at actual prices and values, whereas material-in-process is carried at all times at standard value. As material is issued from stores to producing departments, it is priced at actual and standard both. Raw material account is credited with the actual value work-in-process being charged with the standard value and the difference between the standard and actual value is charged or credited to a material variation account known as the Purchase Variation.

For example — suppose that the standard value of material "A" issued during a month amounted to \$10,000.00 whereas the actual value was \$10,500.00. The following entries would be made:—

Credit Raw Materials	\$10,500.00	
Debit Material in Process		\$10,000.00
Debit Purchase Variation		500.00

Since the Purchase Variation is a Profit and Loss sub-account, the management can see that potential profits for the period were reduced by \$500.00 because purchase prices were higher than anticipated.

To obtain actual costs of any articles containing material "A" it is necessary to multiply the standard value of this material which is contained in the article by the ratio $\frac{10,500}{10,000}$ or 1.05. Thus if the

standard value of this material in a certain product is \$2.00, the actual value for this particular month would be $2.00 \times 1.05 = \$2.10$.

It is advisable to determine purchase variations for each material of importance.

By the introduction of suitable plant operating or performance records it is possible to determine fluctuations in the consumption of materials in excess of or less than standard quantities. These variations are known as Usage Variations.

Here again, by evaluating the standard and actual quantities at standard prices, the amount of the variation can be arrived at and charged to a usage variation account and a ratio can also be found to adjust standard article costs to actual.

(b) Labour

With regard to labour, reports are instituted which record all labour costs which are known to be in excess of standard, as for example—waiting time which is paid for, apprentice training cost, etc. These amounts are credited to the accrued payroll account and charged with the standard labour cost of work which has actually been performed during the month. For example—if piece work is in effect, labour-in-process would be charged with the total piece work labour cost. All labour cost excesses are charged directly to suitable labour variation accounts from the accrued payroll account.

(c) Burden

The Burden-in-Process Account is charged with an amount equivalent to the standard labour cost multiplied by the overhead ratio on direct labour which was used in cost estimates. The differences between the amount charged to burden-in-process and actual burden is charged to the burden variation account.

The burden variation is made up of two distinct amounts. First, there is the amount of variation caused by the expenditure of more or less than the amount allowed in the budget for the actual

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capacity operated (see Fig. 1.) This is an efficiency variation. Secondly, there is the variation due to the under-or over-absorption of overhead in cases where the plant operated at a level lower or higher than the normal production volume. This is known as volume variation expense, or sometimes, idleness expense.

As an example to illustrate this point let us assume that the standard burden rate is 110% of direct labour, and that the following performance was established during a specific month:—

Actual Capacity	60%
Actual Burden	\$ 8,000.00
Burden Budget at 60%	\$ 7,600.00
Standard Direct Labour	\$ 6,000.00
Standard Burden at 110% of Direct Labour ...	\$ 6,600.00

It is obvious from these figures that since the management failed to reduce the expense to pre-determined budget allowance there was an excess cost amounting to —

$$\$8,000.00 - \$7,600.00 = \$400.00$$

Also, whereas the pre-determined standard burden was \$7,600.00, the volume of production, which was below normal, only absorbed \$6,600.00. Consequently there was an excess cost due to volume variation, or idleness expense amounting to —

$$\$7,600.00 - \$6,600.00 = \$1,000.00$$

The total burden variation is \$1,400.00 and the ratio for the month is

$$\frac{8000}{6600} = 1.21$$

(d) Scrap

The actual value of scrap produced during the month must be determined and evaluated by its labour, material and burden content. These amounts respectively are credited to the work-in-process accounts and charged to the scrap variation account.

Entries For Production

Production for the month is summarized by lines and styles and each quantity extended by the standard labour, material, burden, and scrap standard cost. For example—assume that the standard cost of the monthly production as obtained from the extension of quantities by the standard cost was as follows:—

Material	\$ 8,000.00
Direct Labour	6,000.00
Burden	6,600.00
Scrap	1,400.00
	<hr/>
	\$22,000.00

The accounting entries would be as follows—debit finished goods inventory account \$22,000.00 and credit the various work-in-process accounts with the amounts shown for material, labour, burden and scrap.

The cost department after preparing and making all of the above mentioned journal entries has effected the necessary entries to maintain the work-in-process at standard value.

An important step, however, which must now be made is a verification of the amount shown as work-in-process inventory, that is, the amount remaining in the process accounts after all the debits

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and credits have been made for the month. This verification may be made by estimating the increase or decrease since the previous month end in the process inventories and adjusting the balances shown by an entry between the process inventory account and an inventory adjustment account. It is usual to expect an adjustment of this kind monthly to the extent of about 2% of the charges to the process accounts. Several times during the year the work-in-process inventory account should be checked by means of a physical inventory.

Operating Statement

The following will illustrate the form of income statement which is used, showing how the various cost variations are incorporated.

Illustration of Income Statement

TOTAL GROSS SALES	\$xx xxx
Discounts, Replacements, Adjustments, etc.	x xxx
NET SALES	24,000.
COST OF SALES	
Standard Cost	\$18,000.
Purchase Variations	500.
Volume Variation	1,000.
Manufacturing Efficiency Variations.	500.
TOTAL COST OF SALES	20,000.
GROSS PROFIT	4,000.
SELLING, ADMINISTRATIVE, CORPORATE, ETC.	xxx
NET PROFIT	x xxx

Profit Variations

The foregoing discusses the application of standards to manufacturing costs. Similar principles can be applied successfully to sales volume, selling and administration expenses, turnover, balance sheet ratios and profit margins. Every factor which governs final net profit can be compared to a standard and variations therefrom can be displayed.

Apart from variations in production costs variations in the following factors will affect net profits:—

(a) **Sales Volume**

Any forecast of profits of necessity requires a forecast of probable sales. This forecast can be broken down into sales quotas which then become standards. When sales fall below the quota the variation indicates the amount of unrealized potential profits, or conversely.

(b) **Selling Prices**

The standard profit is based on the realization of definite sales prices. Profit variation due to variations from the forecasted or standard prices is one of the measures of sales division efficiency which should be developed.

(c) **Variety of Goods Sold**

Different lines of products frequently have different profit margins and any changes from the estimated percentage of the various lines in the total volume of sales will result in variation from estimated profits. The amount of this variation can be shown.

(d) **Selling and Administration Expenses**

Standards should be set up relating expenditure to sales volume,

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similar to those described for Factory Burden Control, and the effectiveness of the control measured.

(e) Turnover Rates

An important, although seldom recognized, factor in the production of profits is the efficient use of the capital employed. Excess cash in non-interest bearing accounts and slow-moving inventories represent interest losses and excess insurance premiums. Slow collections are the equivalent of lending money to your customers without interest. Definite standards should be set up covering these items and losses or gains determined.

Value of Standard Cost Methods

Contrary to general impressions, accounting for standard costing is not complex. In fact the simpler it is kept the more effective and economical it will generally prove to be. In the larger organizations refinements can be developed and applied but usually it will be found that even there all the benefits can be obtained from an installation which is stripped of non-essentials.

One of the most important factors which must be borne in mind in any accounting work is that statistics and reports must be drawn up and presented in such a way that others than accountants can interpret them. More and more management is taking the superintendent and foremen into its confidence and explaining to them the progress of the plant through the cost reports. Many of these men have not had the opportunity to study accounting and unless the reports are furnished in a simple and effective way much, if not all, of their value will be lost.

By the use of standards accounting records become dynamic, impelling, and force the operating staff continually in the direction of lower costs and more efficient methods of operation. Once adopted, a standard is simply a measuring stick of an activity. It is a goal of accomplishment. Progress towards the goal is chalked up at frequent periods, and most important of all the indicated progress is not based on guess, estimate or judgment, but is definitely tied in to the general accounting scheme. The information presented is simple, concise, and easy to understand.

I cannot emphasize too strongly that the major idea behind this method is not an accounting system but rather control of costs through standards—standards of performance—standards of accomplishment. The whole structure of standard cost methods is built upon the basis of scientifically sound standards covering every activity. That is the one major idea which can be taken and elaborated to suit individual requirements. Accounting methods are incidental.

It seems strange that to many people this idea of standards as applied to industry appears so fantastic. This is the more surprising when we consider the fact that our everyday well-being depends almost entirely upon standards. The milk that we buy must be up to definite standards of quality. The silver we buy it with has definite standards of value. Examples of this kind could be recited for hours. Why then does it seem so novel to consider standards of performance for operation of a business,

Standards properly used mean control.

Most manufacturers are careful to make sure that they actually receive quantities and values for which they pay. They check carefully quantities received against invoices. They check extensions and price. If there is an error of a few cents they will make a claim.

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They also try to make sure that they receive payment for finished goods that they sell. They check carefully the quantities that are shipped out. They check invoices, prices and extensions. They set up reserves for bad debts to take care of losses encountered through customers who cannot pay their bills.

But what happens to the materials and values between these two stages of receipt and shipment?

Possibly the raw materials are locked up in storage bins or warehouses. Possibly the finished goods are maintained under lock and key. But what of the materials and labour and various overhead items between the time they are paid for and the receipt of the customer's cheque which represents the final payment for these items? Here it is that the great preventable losses occur.

Occasionally we will find provision for some of these losses made in the costs, but where these allowances have been made we seldom find that the determination of the allowance goes beyond the point of determining what the loss is instead of proceeding to the logical conclusion of determining what the loss **should be**, and then measuring actuals against this standard.

The field for standard setting is practically unlimited and the profits obtainable from this potential field are vast.

The Newsprint Industry in Canada

By JOHN STADLER

(Before Montreal Chapter, October 4, 1935)

WHEN your chairman approached me some time ago as to appearing before your Society as an after dinner speaker, to talk to you about the paper industry, I hesitated to do so, as I felt that members of a society of cost accountants and industrial engineers would be a very difficult audience for me to address. Eventually I mustered enough courage to accept and suggested two subjects, one entitled *The Paper Industry in Canada with special reference to Newsprint*, and the other, *The Newsprint Industry in Canada, Past, Present and Future*.

Your Chairman advised me that the Society had selected the latter subject, and when I received the circular letter of September 28th, which stated that the Society was extremely fortunate in having as its guest speaker an eminent authority in the paper industry whose address would be on *Newsprint in Canada, Past, Present and Future*, I felt that the Society had materially over rated its speaker.

THE NEWS PRINT INDUSTRY

I have consulted the dictionary as to what "eminent authority" means, and I am very much taken aback as I am sure I cannot meet the specification, but I will speak to you as a mere mortal who has had much to do in the development of the paper industry, not only in Canada but also in other countries, and has studied the commercial aspect of the newsprint industry, and who is very much bewildered at the present time, as his observations point almost diametrically opposite to what is now being practised.

Since your speaker is supposed to talk about the Newsprint Industry, Past, Present and Future, he no doubt must be interested in history. With regards to the present he should be observant and as to the future, you expect him to be clairvoyant.

I have told you before that I am speaking to you as a mere mortal, and therefore any disappointment you may meet in my address to you, you must attribute to the phrase "the spirit is willing but the flesh is weak."

In regard to the second paragraph of your letter stating that the subject is of national importance and that the speaker is an outstanding figure in the pulp and paper field,—this statement I fully agree with. Since I have entered this room I have looked you over very carefully, and I would estimate your average height to be 5'8", and since I measure 5'16", I am pleased to say that I am standing eight inches over you.

Since my address has to deal with the Past, Present and Future, I shall at this time state that for the Past I cover the period from the beginning of this century up to and including the year 1922. For the Present, from 1923 up to the end of next year and for the Future, from 1937 onwards.

I further wish to add that for the Past and Present I am speaking to you as an engineer and manager and when talking about the Future, I must assume the role of an investor and consulting engineer in this great industry of ours. In speaking to you as an investor, I am not appearing as a lion disguised in sheep's clothing for I really am an investor in the Canadian newsprint industry, partly by accident, but mostly by careful study of its past performance and possibilities.

Growth in the Past

The Canadian newsprint industry during the past expanded from a production of slightly over one-quarter million tons per year to slightly less than one and a quarter million tons per year. The mills at that time were relatively small, and the industry as a whole was in the hands of a few persons who made the manufacturing of newsprint and the development of the industry not only their business, but also their hobby. If one applies the phrase that the heart is where your money is, the people who were in the industry at that time certainly had their hearts in it.

If we study the production capacity and actual production, we find that all mills were operating at practically full capacity up to 1920. No excess capacity was provided.

If the heads or, let us say, some of the owners of the paper mills, at that time had assumed in the period which I call the Past, a broader view of the Canadian newsprint industry, they would have made a strenuous effort to expand their manufacturing facilities to be able when called upon, to serve their customers. If that had been done, I believe the industry would have continued to expand normally and would have remained in the control of those who were

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fully qualified to manage the industry; although with a few exceptions, they did not sufficiently study the requirements of their customers, and many paid no attention at all to marketing. This was left to agents who were paid a certain commission and that, in the opinion of the heads of the industry, was all that could be considered to come within their responsibilities as managers or owners.

I am sure if we had with us to-night those who contributed to the development of the newsprint industry in Canada during the period I call the Past, that most of them would assert that the manufacturing problems at that time were paramount, and consequently they all saw it was their duty to devote most of their energy to manufacturing, and that once the product was made, their problems were solved.

I am sure you will agree with me as cost accountants and industrial engineers, that such a policy was not in keeping with good managerial practice, and specially with such a vast industry as the Canadian newsprint industry was even at that period.

It is most unfortunate that on account of the personal interest and intimate contact with the industry, most of these people kept their nose so close to the grindstone that they could not find an opportunity to look sufficiently far ahead. Had there been exercised enough foresight, a \$130.00 price per ton of newsprint, such as we had in the first half of 1921, would not have been permitted nor become necessary.

The publishers themselves saw the opportunity of making money by increasing the advertising space, and consequently did not seriously object to paying such a high price for newsprint.

The temporary drop in consumption in the year 1921 gave time to the existing mills, to put their equipment in order, and together with moderate additions, when the demand for newsprint increased again rapidly in 1922, the mills were just about in a position to meet the demand of the publishers.

The price by then had dropped to \$70.00, but it was soon realized that there was not enough tonnage to go around and the publishers were bidding one against the other, as a result of which, the price subsequently increased again to \$75.00 in 1923.

Owners of the various units comprising the Canadian newsprint industry at that time realized that there must be a further increase in capacity to satisfy the increased demand which had been calculated to be at the rate of 4% cumulative per year.

The increased price of newsprint and the consequent profits, brought the industry into the limelight, which attracted, in particular, certain parties with whom you as accountants had much to do as we will see presently.

Introduction of Costing

It must not be overlooked that during the period I call the Past, much basic development and investigating work was done in the newsprint industry, not only in regard to the technical processes but also concerning accounting and cost work.

I remember quite vividly when I entered the newsprint industry in Canada, which I believe was in 1906, I was amazed at the methods of accounting then in vogue, or rather the complete absence of any detailed departmental cost accounting.

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As an engineer I was trained to use a yardstick and as I was in Canada producing newsprint, I had to use the almighty dollar to measure results of manufacture, but with the absence of subdivided departmental cost, an intelligent analysis was impossible. I spoke to the chief accountant as to my requirements and received very little encouragement indeed. After trying for over two months to improve manufacturing methods, that is to say, reducing cost of production, and not being able to see whether the results had been achieved due to this lack of detailed departmental cost, I finally made up my mind to throw up the job and send in a letter of resignation. Fortunately the General Manager understood my requirements and departmental costs were thereafter supplied.

From the above you will see that I believe in essential departmental costs, but I want to add that any cost system to be of value in manufacturing must be accurate, expedient and economical. There is no use having departmental costs when they are history, but you know that it is possible to produce essential cost figures and unit costs for certain operations, daily, and for some periodically. These can be produced promptly and at a relatively small expense, so that they can be used efficiently not only by the management itself, but by the various department heads responsible for manufacturing to study their operations.

I was very pleased when at a later date several companies in Canada co-operated in an endeavor to have a standardized method of cost accounting in the newsprint industry.

You are most familiar with what has been done in the science of accounting in the newsprint industry and therefore I need not go into any details except to say, I am somewhat afraid that in recent years some of this detailed cost work has been overdone.

There is no use spending five cents to save four, and when I see in some organizations the large number of men who are employed figuring departmental costs and other data for a relatively simple operation, such as the manufacture of newsprint is, I feel that the methods have been complicated, no doubt to convey detailed information to the remote controls. This seems to be in vogue now, most of which details and data, I am sure, can serve no other purpose than to occupy filing space.

Consideration of Price

Before passing on to the next stage, it is in order to state that whereas, let us say, in the year 1914 the newsprint price was only \$38.00 per ton, that such a price at that time and under conditions then prevailing, was a profitable price to those manufacturers who had reasonably efficient plants.

It must not be lost sight of that all materials entering into the manufacture of newsprint including labour were much lower in that period than what they are now, and last but not least, the cost of delivering the manufactured product from the mill to the consumers was only 50% of the cost presently paid.

It is true that in the early part of that period, the mills were very particular as to the kind of raw material used, and if the pulpwood delivered to the mill contained more than 15% of balsam, the balance being spruce, the mill operator simply could not get by with it. As a result, much wood was wasted in the bush, but in spite of that, the cost of wood delivered when the \$38.00 price of paper prevailed, was less than half the present day cost.

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As you all know, as soon as the cost of materials and labour increased, there was a gradual increase in the price of newsprint which had reached \$58.00 by 1918 and finally jumped to the ridiculous price of \$130.00 per ton by 1920.

The Current Period

The Present period, as I have stated, covers from 1923 to, let us say, the end of next year. You will probably ask why I cover such a long period to deal with the present situation. To many of you, no doubt, the present period should start with the general decline of newsprint prices and consumption in 1929.

I believe in the universal law that there must always be a cause to produce an effect. The period from the end of 1922 onwards until the end of 1930 produced the cause, which had the rather unpleasant effect we have witnessed since 1930.

The price of \$130.00 per ton which prevailed for a short time in the beginning of 1921 looked again as a possibility, to some not familiar with the industry, when for the year 1923 a newsprint price of \$75.00 per ton was announced. That was the bugle call to announce the start of expansion to be followed by amalgamation and later consolidation.

There was a period when the entire Canadian population, no doubt due to propaganda, was led to understand that the wood resources of Canada were the only source of supply in the world from which newsprint could be made, as a result of which, the timber lands reached fabulous values.

In addition to pulpwood, Canada at that time was considered the only country that also had in close proximity to its valuable woodlands, enormous water power which, if not already developed, could be developed to supply what, at that time, was considered cheap hydro-electric power.

New paper mills were built, many of them in wrong locations, and extensions were made to existing mills which were economically not justifiable.

To be quite frank with you, I myself jumped on the band wagon and contributed to the newsprint capacity in the figures now used by the Canadian newsprint industry to an extent of over one-quarter million tons per year.

Two of the developments I was directly connected with, did not take full advantage of the natural facilities provided to make newsprint economically, one due to lack of time to make a thorough study and the other due to political influence. Yet in spite of these shortcomings, I am told that these mills are to-day the lowest cost producers.

Values Exaggerated

Investment bankers, now called security dealers, saw an opportunity to sell securities. Paper mill properties and timber lands were purchased at high prices, on which securities of still higher values were issued to the public. All of which can be substantiated now by merely referring to the balance sheets of the various companies comprising the Canadian newsprint industry with which documents, I am sure your association is most familiar.

Those who became masters of the industry in the period of expansion no doubt tried to learn something about the paper making process. Those skilled in the art know, that it requires large volumes of water of a good quality to produce good paper.

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It seems to me that in the haste with which the newcomers tried to acquire the knowledge of paper making, they made a slight mistake and applied the water so essential in the manufacturing of paper, to the securities they issued as part compensation for the properties and their efforts.

My object in bringing this matter before you is to prevent its reoccurrence in the future.

I shall not make any specific reference to any of the companies in receivership, which have been re-organized or those which are operating under the original capital set up. It is really remarkable how men of your profession have been able to substantiate values as shown under the heading of assets of Canadian paper companies. At the present time, these assets could be purchased at a very small fraction per dollar of the original valuation.

I do not want to criticise you for having set up such statements. I believe that at the time that your statements were made, you really believed the prospective properties had such a value.

I have stated in my dealing with the Past that the persons and parties in control of the industry at that time were shortsighted in their policy. As far as you are concerned as accountants, I feel that you have stretched your imaginations, otherwise you could not have certified such book values as the Canadian newsprint industry was representing in 1929.

Not only did the industry during this development period make capital commitments in purchase of property beyond its capacity, but in many mills it burdened the possibilities of competitive production by contracts from hydro-electric power at prices which were not justified then and are certainly not to-day.

Industrial Engineering in Newsprint

I appreciate that I am talking to a society composed of accountants and industrial engineers. The remarks which I am now presenting apply in particular to industrial engineers, provided that my definition of an industrial engineer is correct. It is—an industrial engineer is a person fully versed in the processes of manufacturing and in the market of the particular product to be manufactured, so that he can analyze the whole set up made by accountants on the project which is to be reported upon.

If, in such an analysis, it is found that the amount of money involved in the entire project is not justifiable, then in my opinion, the industrial engineer has no right to approve it, and I am sure if such information had been conveyed to the accountants, that they would not have approved the figures as have been used in order to substantiate some of the most fantastic valuations of several of our Canadian newsprint properties.

In making a valuation of a property, the earning power of the enterprise is the one and only factor, and when you consider that the Canadian newsprint industry depends for 90% of its output on exportation, the figures shown in the prospectuses of many companies could not be substantiated at the time they were issued. The average estimated price for the product could not have been materialized for a reasonable future period if newsprint had been considered as it should be, a world's commodity.

While on this subject of values which affect cost, let me point out to you that in your standardized cost figures as many companies present them now, there is a serious error. This refers to depre-

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ciation, which several mills charge on the basis of production instead of a given percentage on the value of property to be depreciated.

There is another factor that is quite often overlooked in manufacturing processes and which is very important in the paper industry, that is obsolescence. Under the system now in use in many companies, a mill not operating would not depreciate, whereas in actuality it not only depreciates but becomes obsolete at the same time.

In my opinion, you should make a serious attempt to present the real facts about the industry no matter how bad they look, so that the customers of this great industry may be induced to again co-operate with the industry.

The industry, or rather those in control, must be brought to such a frame of mind that if any money is to be made, it will be in manufacturing and marketing of its product and not in the manipulation of the securities.

Present Capacity

During the present period the productive capacity of newsprint paper in Canada increased from 1,150,000 tons to about 3,750,000 tons, and if we include in these figures the paper mill in Newfoundland controlled by a Canadian Company, which is generally included in all capacity figures of Canadian production, the theoretical capacity of the Canadian newsprint industry is 3,900,000 tons.

Since we are talking of the present, we can only consider the facts as they appear now, and in my opinion, the commercial capacity of the Canadian newsprint industry at the present time is 3,500,000 tons per annum; the balance, that is, 400,000 tons is non-competitive and will not be competitive until such time as newsprint paper prices are raised to a figure which, in my opinion, is better not to be aimed at.

On the assumption that Canada has a productive competitive capacity of 3,500,000 tons per year, and considering the fact that the Canadian newsprint industry in the year ending 1934 produced 2,600,000 tons, which is 74% of its competitive capacity, it would appear to anyone not fully acquainted with the situation, that the Canadian newsprint industry should be in a reasonably healthy condition which, however, is unfortunately not the case.

If, however, we take the total or theoretical capacity of 3,900,000 tons, the industry operated at only 67%, which in itself, conditions considered, is not bad but which, of course, would not produce profitable operations. Yet, if orderly methods of development had been used, the industry should have been able to carry on, provided it had a sound financial structure and reserves which could have been built up during the years of extreme prosperity prevailing in the early part of the period under review.

Instead of that, over 2,300,000 tons, which is equivalent to 60%, of the theoretical capacity of the Canadian newsprint industry, were in the hands of receivers or had been re-organized at the end of 1934.

The Prospects for Prices

It is quite true that the prices presently prevailing are not sufficiently profitable to the Canadian newsprint industry. The question before us is, at what price under present conditions can newsprint be sold for, and how can this price be obtained.

In an endeavour to improve the newsprint situation, not very long ago, much publicity was given in the Canadian press to the intervention of two of the provincial governments to improve the price levels prevailing.

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It has always been my opinion that governments have plenty to do to look after the internal affairs of their territories, and since the product of the Canadian newsprint industry is exported to an extent of about 90%, I fail to see what good would arise from any action on the part of any government in Canada, if the industry within itself cannot agree on a policy.

Even an attempt to change the price of the Canadian newsprint paper by government action seems to me will result in further antagonizing the already rather irritated American publishers, who are the buyers in Canada's most profitable export market for newsprint paper.

The difficulty which the Canadian newsprint industry has at the present time, as you all know, is to some extent brought about by insufficient and disorderly development of the industry in the past, too rapid expansion during the period which I term the Present and to a larger extent to the absence of elementary co-operation. It is most unfortunate that such has been the case.

Future of the Industry

Is the Canadian newsprint industry to remain a plaything for a few to the disappointment of the many? Is it not about time to call off the poker game or is the game still worth the candle?

The Canadian newsprint industry is basically sound, but to make it reasonably profitable requires co-operation within the industry, to formulate and carry out a marketing policy.

There is no use anticipating the day when the price of newsprint will rise to such a level that even our obsolete mills will again become profitable.

Much progress has been made during the last decade in the development of new processes, and Canada can no longer claim any particular advantage over other countries producing newsprint which have become important factors in the world's production of this commodity.

The Canadian manufacturers can no longer expect to sell their newsprint paper to produce a higher mill net price on the export market than they receive at home.

In making the above statement, I wish to emphasize that I consider all paper sent out of Canada as export, and I am sure your Society does likewise; but I feel it necessary to be specific as I know many people, who should know better, who still believe export applies only to products shipped overseas.

It is evident, to anyone who has studied the subject, that the Canadian newsprint industry to become profitable, not only requires an increase in price, but also an increase in tonnage.

There is no doubt in my mind that the increase in tonnage will be obtained by the natural tendency of consumption to increase, provided that confidence is restored to the consumers of the product who will in turn encourage its use. This presupposes that they can rely on a continuous supply of moderately priced newsprint. Any attempt to increase the price above the level warranted would, in my opinion, defeat the chances of a return to prosperity for the Canadian newsprint industry.

I appreciate that tons of securities which appeared during the end of the development period of the Canadian newsprint industry are held either by individual investors, or by corporations, all of whom are anxious to see them become of some value. Any attempt on the part of such security holders to speed up the revaluation of

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what might at present be worthless paper, would have a serious effect on the immediate and near future.

The Canadian newsprint industry has in the latter part of the present period struggled along as well as it could, and very few paper mills have been given the necessary money to improve the properties so that they could be considered as really competitive, even though some of these properties are, in my estimate of the productive capacity, considered as competitive.

The Investor

The investors in the Canadian newsprint industry will have to take a long range view, and some of the properties will have to be modernized as soon as money becomes available. In other words, money earned by the respective mills will have to be put back to work, to improve those competitive mills before the anxiously waiting investor can expect to get a reasonable return on his money.

If such a policy is not pursued for favourably located mill properties, the inevitable result will be that the mills to be modernized will not be able to make money at the prices which I consider newsprint made in Canada will fetch in the future. The final outcome would be that the industry would not expand and we would only see to a lesser degree, the repetition of the happenings of the past period. There would be no drastic raise in prices, but new construction outside of Canada would be intensified.

When the competitive capacity of the Canadian newsprint industry, as a whole, is brought to an efficient operating stage, it will be able to pay a reasonable return on a legitimate investment; but it will never be able to pay any return on book values which are still in evidence with some corporations, some of which, no doubt, will be adjusted.

Much criticism has been placed on the Canadian newsprint industry on account of its over-capitalization. Any further calculations pertaining to the industry cannot be based on the present capital structures, but on replacement values. With such a basis, the capital structure assumes a secondary place

Replacement Values

In analyzing replacement values, one must take into consideration the number of locations where new newsprint mills could be built in Canada, and these are relatively limited, but nevertheless, I feel that if an attempt were made to increase the price unreasonably, new mills would be built before the existing commercial capacity of the Canadian newsprint industry could be utilized to its fullest extent. Developments outside of Canada would also be accelerated if the price of newsprint paper were raised to an unwarrant level. We must not overlook the fact that since Canada stopped building newsprint mills, Europe has increased its yearly competitive capacity by 750,000 tons, and this figure does not include Russia, about which country, we have not sufficiently exact information.

I have made a careful study of several available mill sites in Canada for the construction of newsprint mills, the cost of making and delivering paper to the customer and the capital requirements.

On the assumption that we build a mill of 300 tons daily capacity, which is the smallest competitive unit we can now consider, it would require \$6,800,000. for the mill site and mill complete, and to be reasonably free from banking problems, a further amount of \$1,200,000. would be required for operating capital. For woodlands and

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improvements to these, a further sum of \$700,000. is required, so that even under present favourable conditions for construction, at the most favourable location still available, a minimum of \$8,700,000. is required to start a new mill.

This figures out to \$29,000. per ton daily competitive capacity. If we compute $2\frac{1}{2}\%$ on the cost of mill and woodlands for depreciation and depletion, and $2\frac{1}{2}\%$ for obsolescence of the mill, and last but not least, allow 6% on the capital invested, which I am sure is not too much, for an industrial enterprise, we arrive at a cost of \$43.50 per ton of paper delivered in the United States in the zone favourably located to a new mill built in the Province of Quebec.

Having established the price for which newsprint can be manufactured with highly efficient and modern equipment in the Province of Quebec, and delivered to the most advantageously located market under present conditions; and incidentally this price is lower than can be met by many existing mills in Canada, the question then to be considered is "What can paper be sold for?"

Association at Work

It must be as pleasing to any investor as it is to myself to know, that there has been established in Canada an association of Newsprint Export Manufacturers, which is not afraid to come forward and publish statistics and opinions concerning the newsprint situation. What is more pleasing, the Association affirms that newsprint paper is a world's commodity and not a domestic product.

With the acceptance of newsprint as such, does it not suggest itself that as long as we deal with a world's commodity, the marketing of such a product requires world knowledge?

I sincerely hope that the Newsprint Export Manufacturers Association will exercise enough influence over its members so that they will not repeat the mistakes of the past and compete against each other by selling their product at a ridiculous reduction in export markets.

It does seem to me that it is not to the credit of an executive to make a trip to an overseas country, or send a representative, and dump his product in that country at a price of from £1-0-0 or more below the prevailing market price. This as we all know, when considering a world's commodity, just speeds up the pace of travel along the vicious circle.

Would it not be more appropriate if the Newsprint Export Manufacturers Association made arrangements with qualified agents who know the marketing of paper in their particular districts, and arrange to pay them the prevailing commission or establish efficient agencies,

For example, I am told that in England, the prevailing commission for marketing newsprint is $2\frac{1}{2}\%$ on the delivered price. If the price is £9-10-0 per long ton, the commission amounts to £0-4-8, which in our currency means, depending on exchange, less than \$1.25. Under the spasmodic action of a person not familiar with local conditions, and probably under the pressure of a shrewd buyer, a reduction of Five Dollars or more has been given on the price, instead of the modest sales commission.

Selling the Product

I have often said before that the Canadian newsprint industry has never seriously considered the marketing of its product. High

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officials took a hand in the selling of newsprint paper without having the elementary knowledge or training for such an important function.

Let us define salesmanship. In my opinion, it is that personal representation on which a person can get an order for the commodity he offers at the same price as his competitor and sometimes at even a little higher price.

What are present prices? In Canada, the base price, I am told, is \$36.00 per ton of newsprint. The base price in the United States in the zone favourably located to Quebec mills, just now is \$40.00 per ton. In England, the base price is £10-0-0 per long ton which is equivalent to \$44.50 per ton of 2,000 pounds.

I have looked over records on prices, covering a long period, and these point to the fact that the English price was always lower than the Canadian price. Does that not conclusively establish that our present price is too low?

I have said before that under present conditions and using the most advantageous mill site still available in the Province of Quebec, that newsprint paper could be produced and delivered to American markets where the present price is \$40.00 for \$43.50. I ask you if it is correct to base the minimum price on the production cost of the most advantageous mill site?

On the assumption that such a price would be fair, I am quite positive that it could not be obtained without seriously affecting the consumption of newsprint paper. I am confident, however, that a moderate increase in newsprint prices will not be seriously objected to by any American consumers, and I hope that the Canadian publishers will offer a higher price so as to live up to the proverb that "charity begins at home."

The immediate future should show what has been accomplished up to now. If the industry is allowed to drift along the way it has, there must be a specific object in the minds of some of those who exercise a material influence on its internal policy.

The Canadian newsprint industry not only requires the formulating of a sensible marketing policy, but what it needs still more and should have had yesterday is, a constructive policy for the co-ordination and re-organization of that large percentage of its capacity which is in financial difficulties.

I have stated before that I am opposed to any government's interference with the industry insofar as it concerns the price of paper. But I welcome any government's intervention when it concerns the disintegration of the industry, and in case a policy cannot be formulated at once by the industry so as to prevent impending disaster, the governments must step in to protect it and prevent a national calamity.

In my opinion, a further delay in formulating and carrying out a definite constructive policy for the Canadian newsprint industry cannot produce any permanent advantage even to those who continuously manoeuvre to improve their position by constantly deferring action. It is certainly of no benefit to those who in view of their actual investment in the industry should be the rightful owners and have something to say about it. Last, but not least, it is a serious detriment to Canadian business as a whole.

If a definite policy is not adopted now and carried out in the future, I can only see as a result the eventual fight for the survival of the fittest.

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Two years ago, such an action would have been less costly than it would be now, and consequently it entered in the realm of the permissible. A price war to the finish now or later will be a calamity not only for the Canadian newsprint industry, but it will also have a repercussion on Canada as well.

The way I see the Future after carefully weighing all the facts as I know them and as they affect the newsprint industry as producing a world's commodity, is that co-operation can start a return to improved conditions with the year 1936.

If there is effective co-operation, the industry can further improve its earning power in 1937, and probably reach a price and consumption level by 1938 which will be satisfactory, both to the producer and consumer.

In the absence of any co-operation and the consequent danger of continued aggression by some of the units, which has been much in evidence in the recent past, a fight for the survival of the fittest must ensue, which will delay the recovery of the industry to 1940 and even later.

I thank you.

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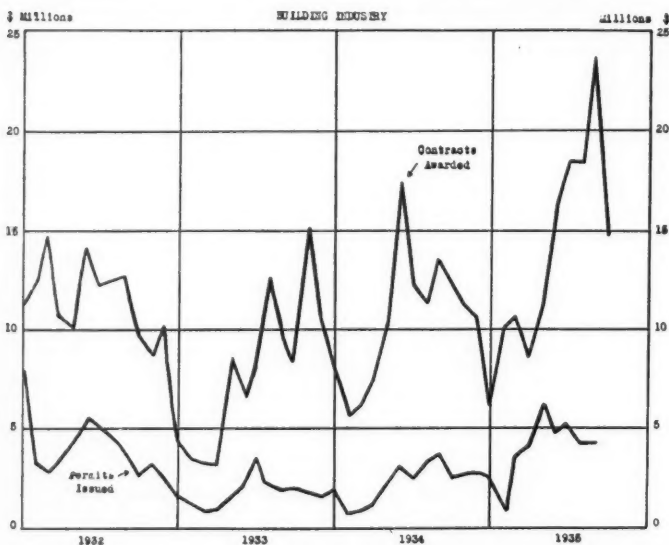
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INCREASED BUILDING HELPS BUSINESS

By W. A. McKAGUE

ONE of the features of the depression period in Canada was the extreme dullness in the building industry—itsself a result of employment and buying power, and in turn a contributing cause to depression in other lines. Building is not as quick to recover as are those industries which are closer to day-to-day buying, nevertheless some favorable change is already evident, and is beginning to help other business by distribution of new purchasing power.



Two reliable records furnish a monthly and yearly check on the volume of building in Canada. One is the list of building permits for leading cities, compiled by the Dominion Bureau of Statistics. The money total for such permits showed a steady rise in the 1925-29 period of prosperity, reaching the record total of \$234,900,000 in 1929. Then it dropped down to the extreme low of \$21,776,500 in 1933. The second set of statistics are those of actual contracts awarded, as compiled by McLean Building Reports, Ltd., which run to higher figures because they include engineering work, and building in all parts of the country. They reached over \$560,000,000 in the peak year 1929, and fell off to less than \$100,000,000 in 1933. Probably no other major industry suffered such extremes of boom and depression.

INCREASED BUILDING HELPS BUSINESS

The current trend is brought out in the accompanying chart showing monthly figures. Though the year's totals for 1933 were below those for 1932, the extremely dull early months were responsible for that, and the later months of 1933 compared more favorably with those of 1932. The next year of recovery—1934, brought a distinct improvement in every respect, the building permits gaining to over \$27,000,000, and the contracts to over \$125,000,000, both showing a recovery of approximately 30 per cent over 1933. In 1935 to date this trend has continued at a still more rapid rate. In the first eight months the building permits were nearly double those of the first eight months of 1934, while for the nine months ended September the gain in contracts was over 35 per cent as compared with the first nine months of 1934. It will be seen from the chart that the seasonal peak in each case was well over the peak in at least two years past. With the seasonal activity now over, it is evident that the full year 1935 will record very important gains.

This is a distinctly encouraging feature of current business. First of all, as an index of general activity, it reflects the ability of people to rent or buy new homes, and of factories and other business concerns to make new additions. A market for real estate, based on earning and buying power, is being gradually restored, and that means better values, and the feeling by all owners that they are better off and consequently able to spend more, than was the case when many properties had no real saleability.

JOINT GOLF GAME AT LAKEVIEW CLUB

A modest representation of about 20 members and their friends turned out to a joint golf game arranged for members for Toronto, Hamilton and Central Ontario Chapters, on September 16th at the Lakeview Golf & Country Club. The details were looked after by Toronto Chapter. Had it not been for Harold Wright and Bill Smitton, our golf specialists from Hamilton, the average score would have been terrible, and it was bad enough, being swelled by the prodigal strokes of another attendant from Hamilton.

The prizes for merit and demerit went to Messrs. Wright and Smitton, of Hamilton, to Geo. Abrams of Toronto, W. A. McKague and to several guests. Chairman Jardine of Central Ontario Chapter capably represented that branch of our Society.

The dinner attendance was somewhat better, several of the Toronto directors coming along for their business meeting which was held afterwards.

The Society is indebted to Perc. Roberts and Geo. Abrams for again securing the use of Lakeview Club for this event, which was enjoyed by all present.

CHAPTER NOTES

TORONTO

Toronto Chapter has emphasized its social side at the start of this season, the first event being a "Millionaire's Night" held on October 4th at the Third Battalion Club, the facilities of which were secured for this occasion by Chairman Gordon Dingle who incidentally is the founder of that club, and is now its chairman.

Some of us may have felt like millionaires at the start, but we soon met our respective Waterloos and concluded sadder and wiser. The few who did succeed in enhancing their capital and thereby gaining the prizes were Mr. Ross, a visitor; A. Screaton, of Toronto Hydro; Mr. Ireland, of Canadian Wirebound Boxes Ltd.; Arthur W. Island, of Canadian Acme Screw & Gear, Ltd.; and Mr. Kirby, a visitor.

The attendance on this occasion totalled 53, or better than is usual for our social events.

For the first regular meeting, it is hoped to get a prominent speaker, and definite announcement is withheld pending the Dominion election.

CENTRAL ONTARIO

Reported by W. A. McKague

The opening meeting of Central Ontario Chapter this season was at Guelph on September 26th, the pleasant facilities of the Guelph Armouries being again secured for us by past-chairman Earnshaw. There were about 15 members and their friends present, to hear Charlie Landell, secretary-treasurer of Canada Dry Ginger Ale, Ltd., and one of the directors of our Toronto Chapter, speak on Costs in the Production of Beverages. It became evident, as he gave his talk, that his company has progressed far in its costing, and has had to do much pioneer work because of the peculiarities of the industry. We hope that he will provide a copy of his address for publication. Those present at the meeting evinced keen interest in the points which he brought out, and a good discussion followed.

A meeting of somewhat different type was held by the Chapter just a few days later, on October 1st, at Woodstock. This was arranged largely by R. Odendahl, our member from La France Textiles, Ltd., of that city, the date being advanced because the chosen subject was the new 48 hour week law of the Dominion government, which came into force on October 5th, and concerning which there has been some anxiety among employing concerns. The speaker was

CHAPTER NOTES

H. W. Macdonnell, head of the Industrial Relations Department of the Canadian Manufacturers' Association. It was an open meeting, for all who cared to come, and it drew the amazing total of 140 people from Woodstock, London, Kitchener, Guelph, Brantford and other points. The meeting was held in the La France Textile show-room. The speaker was introduced by John R. Shaw, a former president of the Canadian Manufacturers' Association.

The new 48 hour law, said Mr. Macdonnell, had been brought about by the International Labour Association, which is attached to the League of Nations. The first 48 hour convention was passed by the Association in 1919, and since then it has been ratified by 17 countries. It was made law in Canada this year, but several exceptions have been made for supervisors, special shifts, etc., and for the time being there is considerable leeway in regard to its enforcement. There is also a question as to whether the Dominion is within its power in such legislation. A general discussion concluded this very successful meeting.

MONTREAL

Reported by R. Schurman, C.A.

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COST AND MANAGEMENT

"Sir Hugh Allan." The tidy craft was placed at the disposal of the Montreal Chapter and their friends, by the Harbour Commissioners, under whose excellent management the Harbour of Montreal and its massive elevators, warehouses, railway system, tugs, dredges, scows, comprise a marvel of modern engineering skill. One writer claims that "The Harbour of Montreal, one of the most daring and sportsmanlike pieces of commercial enterprise, is amongst Canada's most valuable assets." After our trip of inspection we can say with Ripley, "Believe it or not," but we think it is true.

This great seaport which functions 1,000 miles from the ocean, has seven miles of accommodation for vessels drawing thirty feet of water or over, and many more miles for vessels requiring less than that depth. In the course of our trip we were made to realize the smooth functioning of this gigantic terminal, which in its restricted period of 7½ months of navigation, handles more grain than any other port on the world's surface. This sounds like an American boast, but it is not—it is truly Canadian. "We have the goods; we have the men; we have the money too."

The Industrial Engineers made an eye-check of the number of heat units and potential horsepower, in the dozens of enormous coal piles along the waterfront. We watched the easy operation of the huge mechanical unloaders; we saw enormous oil tanks tied up to the wharves, with little or no signs of life aboard, but we could not help realizing that today's tremendous tonnage of "crude" being poured out into storage reservoirs, might be tomorrow's "gas" for Lizzie.

Annual Banquet

Reported by H. S. MacNeice

6.30 o'clock, p.m., Friday, October 4th, was zero hour for the commencement of the Montreal Chapter's activities for this season, which opened with the annual banquet in the Windsor Hotel. A very representative gathering of members and their guests was present, and an excellent dinner, thanks to the efforts of the banquet committee under the chairmanship of Mr. T. I. Smyth, was provided. Mr. R. E. Heartz was kept very busy as chairman of the reception committee.

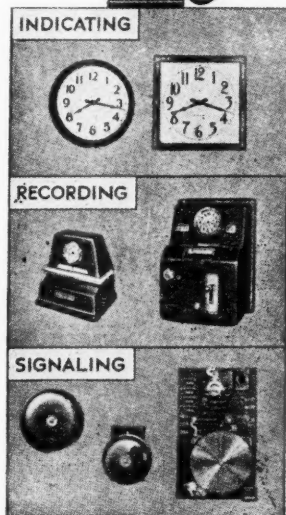
The Chapter was fortunate in securing, as guest speaker, Mr. John Stadler, who, by his vast knowledge and able manner, kept his audience keenly interested during his address on "The Newsprint Industry in Canada, Past, Present and Future".

In dividing his talk into three periods, Mr. Stadler dealt with the past, up to 1922, and explained the rather haphazard methods of cost-finding, etc., then employed by the industry. In reviewing the present, from 1922 to 1936, he pointed out the weaknesses of the



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systems in vogue,, and under the heading of "Future", gave his opinion on what should be done to place the industry in the strong position which it should hold.

Col. R. R. Thompson, whose vote of thanks to the speaker was heartily endorsed by those present, stressed the salient points of Mr. Stadler's address.

Mr. L. N. Buzzell, C.A., vice-chairman, Montreal Chapter, proposed a vote of thanks to the press for their co-operation, to Miss Mable Hutchins who rendered Henry VIII dances at the piano, and to her brother, Mr. Charles Hutchins, the ballad singer, whose interpretations of various sea songs delighted his hearers.

A dance number by the Morgan sisters and banjo and musical saw numbers by Harry Moscou were provided by Norman's Vaudeville agency.

Messrs. Clinton Henderson, president, Montreal Board of Trade, Gaston Choquette, C.G.A., president, Canadian General Accountants Association, R. C. Stevenson, C.A., president, Society of Chartered Accountants, P.Q., and R. W. Louthood, president, Dominion Board, Canadian Society of Cost Accountants and Industrial Engineers, spoke on behalf of their respective organizations.

L. A. PETO HONOURED

Leonard A. Peto, vice president of Canadian Car & Foundry Co. Ltd., past president of our Society and past chairman of Montreal Chapter, was honoured a few weeks ago by election to the presidency of the Dominion Football Association. Mr. Peto himself was a football player in his earlier years, and was an outstanding goalkeeper.

McGILL UNIVERSITY EVENING CLASSES

McGill University, Montreal, in its series of evening classes announced for this season, includes several general accounting topics, also Advanced Cost Accounting, conducted by D. R. Patton, C.A., and Industrial Management, conducted by G. I. Mackenzie.

NEW ACCOUNTING PUBLICATION

"The Accountants' Digest" is a new quarterly publication started with an issue of September, 1935, by L. L. Briggs, of Burlington, Vt., who is connected with the University of Vermont. The first issue contains 102 pages of extracts from various accounting and business publications. The yearly subscription is \$2.

